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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HARRISON, CHANTE E

ART UNIT PAPER NUMBER

2628

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/263,114

Applicant(s)

YEH ET AL.

Examiner

Chante Harrison

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/18/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,23,24,28-32,37 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 8-22,25,38 and 42-498 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-32 and 37-49 in the reply filed on 6/18/02 is acknowledged.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 28 and 37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 28 and 37 are representative of printed matter as they claim a manipulation of images on a display which is non-functional because the data is not manipulated by any of the statutory categories which are processes, machines, manufactures and compositions of matter. Additionally, the claim language of claims 1, 28 and 37 do not indicate for example, a manipulation of data for output to computer display that physically transforms the article or object to a different state or thing. Therefore the claim language does not present a practical application by physical transformation or production of a useful, concrete and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 23-24, 26, 28-32, 37, 39-41 rejected under 35 U.S.C. 103(a) as being unpatentable over Robert Cherry et al., US 5, 629,720, 5/1997.

As per independent claim 1, Cherry discloses determining whether a first display position on a display panel at which a first pixel of the output image is to be displayed is within an active display region of the display panel (i.e. window index and frame buffer data are relative to addresses for display col. 6, ll. 8-20, where a pixel may be mapped to an address corresponding to the color look up tables col. 4, ll. 4-9; col. 3, ll. 10-15; and determining whether plane enable data col. 10, 8-12, 50-55 and index data col. 10, ll. 20-27, 55-60 indicate an active status for a window to be displayed)

performing active display processing (i.e. resolving dominance of priority of display) (col. 11, ll. 9-21) if the first display position (col. 6, ll. 8-20) is within the active display region of the display panel (col. 11, ll. 9-21); and updating the color data during blanking intervals (col. 4, ll. 21-25).

Cherry fails to specifically disclose performing blanking processing if the first display position is not within the active display region of the display panel.

It would have been obvious to one of ordinary skill in the art to include performing blanking processing if the first display position is not within the active display region of the display panel with the method of Cherry because Cherry teaches refreshing during blanking interval (col. 13, ll. 20-37), which indicates that the data is input into the color maps prior to the data being used to determine active status.

One of skill in the art would have been motivated to include performing blanking processing if the first display position is not within the active display region of the display panel with the method of Cherry for the advantage of updating color data when the window data is not active.

As per dependent claim 2, Cherry discloses performing selective display processing if the first image and the second image are not both active at the first display position (i.e. when 1st or 2nd image, e.g. cursor and overlay, is active the color of one image is processed for output) (col. 12, ll. 1-5); and performing composite display processing if the first image and the second image are both active at the first display position (i.e. when 1st and 2nd images, e.g. cursor and overlay, are active the color data is integrated) (col. 11, ll. 10-35).

As per dependent claim 3, Cherry discloses the first image (Fig. 5 "206") is active at the first display position (col. 10, ll. 20-27, i.e. cursor active) if the first display position is within a first display area to be occupied by the first image (i.e. position of data in a plane that is enabled to indicate further processing for display) (col. 10, ll. 8-13) and

wherein the second image (fig. 5 "208") is active at the first display position (col. 10, ll. 55-60, i.e. overlay active) if the first display position is within a second display area to be occupied by the second image (i.e. position of data in a plane that is enabled to indicate further processing for display) (col. 10, ll. 50-55).

As per dependent claim 4, Cherry discloses selecting, as the first pixel of the output image, either a first pixel of the first image if only the first image is active at the first display position or a first pixel of the second image if only the second image is active at the first display position (i.e. when 1st or 2nd image, e.g. cursor and overlay, is active the color of one image is processed for output) (col. 12, ll. 1-5).

As per dependent claims 5 and 7, Cherry discloses the first pixel of the first image is a pixel of the first image whose display location corresponds to the first display position and wherein the first pixel of the second image is a pixel of the second image whose display location corresponds to the first display position (i.e. the cursor, e.g. 1st image, and overlay, e.g. 2nd image, are active for the same buffer data) (col. 4, ll. 43-51; col. 11, ll. 8-12).

As per dependent claim 6, Cherry discloses a blend mode control for controlling the blending function (col. 11, ll. 54-65).

Cherry fails to specifically disclose blending a first pixel of the first image with a first pixel of the second image to generate the first pixel of the output image.

It would have been obvious to one of ordinary skill in the art to include blending a first pixel of the first image with a first pixel of the second image to generate the first pixel of the output image with the method of Cherry because Cherry teaches using a blender dominance output, which would resolve the dominance of blend priority of the cursor, e.g. 1st image, and overlay, e.g. 2nd image, with the image, e.g. video, data.

One of ordinary skill in the art would have been motivated to include blending a first pixel of the first image with a first pixel of the second image to generate the first pixel of the output image with the method of Cherry for the advantage of controlling the output of a digital image blender.

As per dependent claim 8, Cherry discloses selecting, as the first pixel of the output image, either a first pixel of the first image, a first pixel of the second image, or a blending of the first pixel of the first image and the first pixel of the second image (col. 4, l. 43-55; col. 11, ll. 10-35; col. 11-12, ll. 55-10), based upon a processing control input (col. 13, ll. 42-46), the processing control input indicating whether the first image is transparent or opaque, whether the second image is transparent or opaque, and whether the first image is on top of the second image (col. 13, ll. 42-46; col. 10, ll. 18-22, e.g. cursor transparency; col. 10, ll. 50-55, e.g. overlay transparency; col. 11, 10-35, e.g. resolving dominance for priority of display).

As per dependent claim 23, Cherry discloses performing blanking display processing if the display panel is in the blanking display mode (i.e. updating the color data during

Art Unit: 2628

blanking intervals) (col. 4, ll. 20-25), the first display position is within the active display region if the display panel is not in the blanking state (i.e. Resolving dominance of priority of display) (col. 11, ll. 9-11).

Cherry fails to disclose determining whether the display panel is in a blanking state.

It would have been obvious to one of ordinary skill in the art to include determining whether the display panel is in a blanking state with the method of Cherry because Cherry teaches using start and stop registers to determine blanking intervals for updated color data (col. 13, ll. 20-37) where the color data addresses correspond to output display location (col. 3, ll. 10-15).

One of ordinary skill in the art would have been motivated to include determining whether the display panel is in a blanking state with the method of Cherry for the advantage of updating the display to indicate no active window data at a display location.

As per dependent claim 24, Cherry discloses the display panel is in the blanking state if the display panel is in a vertical blanking period (col. 4, ll. 22-26; col. 13, ll. 20-25).

As per dependent claim 26, Cherry discloses generating, based upon a blanking control input (i.e. the write of a command, e.g. $(1)_2$) (col. 13, ll. 26-27), either a blank signal, an end of active video (EAV) signal (i.e. a stop signal) (col. 13, ll. 20-26), a start of active

video (SAV) signal (i.e. a start signal) (col. 13, ll. 20-26), a constant value, a previous output pixel, or a pixel of ancillary data.

As per independent claim 28, Cherry discloses determining whether a first image (i.e. cursor) (Fig. 5, "206") and a second image (i.e. overlay) (Fig. 5 "208") are active (col. 10, ll. 20-27, cursor active and col. 10, ll. 55-60, overlay active) at a current display location on the display panel (i.e. color address determined) (col. 10, ll. 25-27, 58-60) (i.e. and the address corresponds to output display position) (col. 3, ll. 10-15);

performing a first function (i.e. resolve color dominance) (col. 11, ll. 9-15) if the first image and the second image are both active at the current display location (i.e. when 1st and 2nd images, e.g. cursor and overlay, are active the color data is integrated) (col. 11, ll. 10-35); and

performing a second function (i.e. selective blending) (col. 11-12, ll. 54-10).

Cherry fails to specifically disclose performing a second function if the first image and the second image are not both active at the current display location.

It would have been obvious for one of ordinary skill in the art to include performing a second function if the first image and the second image are not both active at the current display location because Cherry teaches when 1st or 2nd image, e.g. cursor and overlay, is active the color of one image is processed for output (col. 12, ll. 1-5).

One of ordinary skill in the art would have been motivated to include performing the second function if the first image and the second image are not both active at the

Art Unit: 2628

current display location with the method of Cherry for the benefit of being able to pass the color of one of the images without blending.

As per dependent claim 29, Cherry discloses determining whether the current display location is within a first display area to be occupied by the first image (i.e. determining if the cursor data is active within the display window) (col. 10, ll. 2-35) and a second display area to be occupied by the second image (i.e. determining if the overlay data is active within the display window) (col. 10, ll. 50-67).

As per dependent claim 30, Cherry discloses selecting, as the output image, either the first image if the first image is not transparent and to be displayed on top, the second image if the second image is not transparent and to be displayed on top (col. 4, ll. 42-50).

As per dependent claim 31, Cherry discloses blending (col. 11-12, ll. 54-10) the first image, e.g. cursor, (Fig. 2 "206") with the second image, e.g. overlay, (Fig. 2 "208") to generate the output image (Fig. 3 "304"; co. 2, ll. 64-67) if the first image is transparent (col. 10, ll. 18-25) and to be on top (col. 11, ll. 10-35, 55-65), or the second image is transparent and to be on top.

As per dependent claim 32, Cherry discloses selecting, as the output image, either the first image if the first image is active and the second image is not active at the

current display location (col. 12, ll. 1-5) or the second image if the second image is active and the first image is not active at the current display location (i.e. when 1st or 2nd image, e.g. cursor and overlay, is active the color of one image is processed for output) (col. 12, ll. 1-5).

As per independent claim 37, Cherry discloses performing active display processing if the display panel is not in the blanking display mode (i.e. Resolving dominance of priority of display) (col. 11, ll. 9-11); and

performing blanking display processing if the display panel is in the blanking display mode (i.e. updating the color data during blanking intervals) (col. 4, ll. 20-25).

Cherry fails to disclose determining whether the display panel is in a blanking display mode at a first display location on the display panel, the first display location corresponding to a location on the display panel where a first output pixel is to be displayed.

It would have been obvious to one of ordinary skill in the art to include determining whether the display panel is in a blanking display mode at a first display location on the display panel, the first display location corresponding to a location on the display panel where a first output pixel is to be displayed with the method of Cherry because Cherry teaches using start and stop registers to determine blanking intervals for updated color data (col. 13, ll. 20-37) where the color data addresses correspond to output display location (col. 3, ll. 10-15).

One of ordinary skill in the art would have been motivated to include determining whether the display panel is in a blanking display mode at a first display location on the display panel, the first display location corresponding to a location on the display panel where a first output pixel is to be displayed with the method of Cherry for the advantage of updating the display to indicate no active window data at a display location.

As per dependent claim 39, Cherry discloses wherein the second image comprises a video image (i.e. frame buffer or image data) (Fig. 2 "202").

As per dependent claim 40, Cherry discloses the third image comprises a graphics image (i.e. overlay data) (Fig. 2 "208").

As per dependent claim 41, Cherry discloses wherein the fourth image comprises a cursor image (i.e. cursor data on a cursor plane) (Fig. 2 "206"; col. 2, ll. 37-41).

4. Claims 8-22, 25, 27, 38 and 42-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

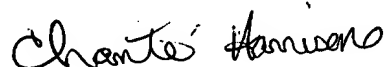
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday, Tuesday and Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chante Harrison
Examiner
Art Unit 2628



Ch
October 25, 2006